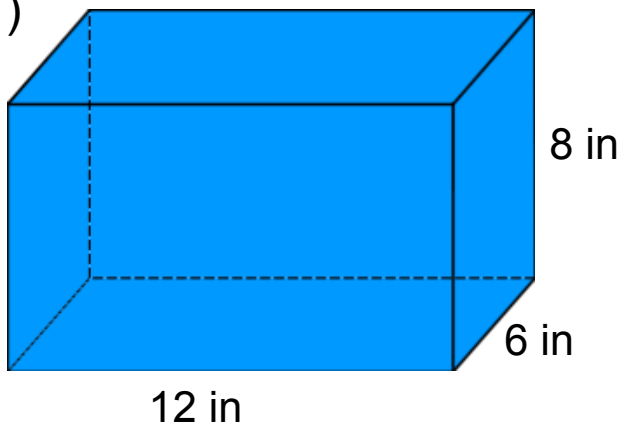


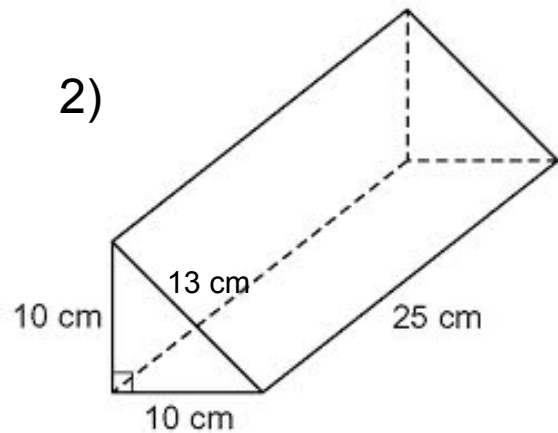
Warm-Up

Find the surface area and volume of the two prisms below.

1)



2)

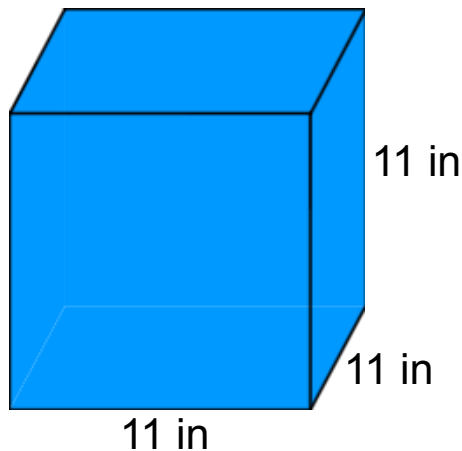


3) Solve the following equation:

$$2(3x - 5) + 7 - 2x = 13$$

Finding the Missing Length of a Cube

First, let's review how to find the surface area of a cube....



$$SA = 2 (LW + LH + WH) \quad \text{Formula}$$

$$SA = 2 (11 \times 11 + 11 \times 11 + 11 \times 11) \quad \text{Plug in values}$$

$$SA = 2 (121 + 121 + 121) \quad \text{Multiply to simplify}$$

$$SA = 2 (363) \quad \text{Add inside parenthesis}$$

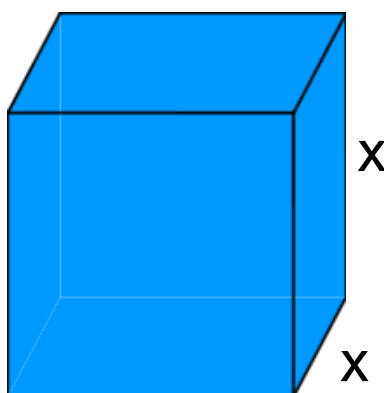
$$SA = 726 \text{ in}^2 \quad \text{Surface Area}$$

Now, if you were given just the surface area of a cube, how could you find the lengths of the sides?

Take a minute to think about it and write down your thoughts.

Since all side lengths of a cube are the same, you are just solving an equation using inverse operations! Let's try it out...

The surface area of the cube below is 486 cm^2



$$SA = 2(LW + WH + LH)$$

$$486 = 2(x^2 + x^2 + x^2)$$

$$486 = 2(3x^2)$$

$$486 = 6x^2$$

$$\frac{486}{6} = \frac{6x^2}{6}$$

$$\sqrt{81} = \sqrt{x^2}$$

$$9 \text{ cm} = x$$

x

Plug in missing values and simplify.

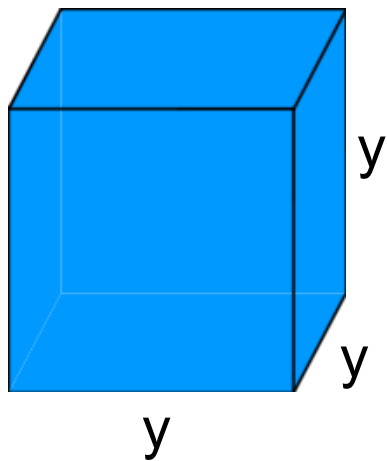
Solve your two-step equation!
First, divide both sides by 6

Then, take the square root of both sides to get rid of the exponent.

Then, you have your answer!

You try!

$$SA = 1014 \text{ in}^2$$

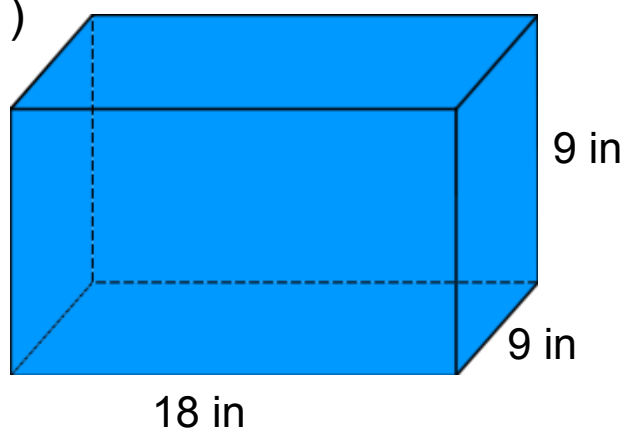


**MOVE FOR
ANSWER**

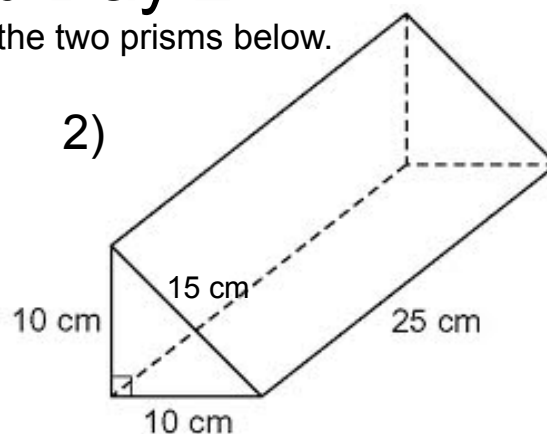
Warm-Up Day 2

Find the surface area and volume of the two prisms below.

1)



2)



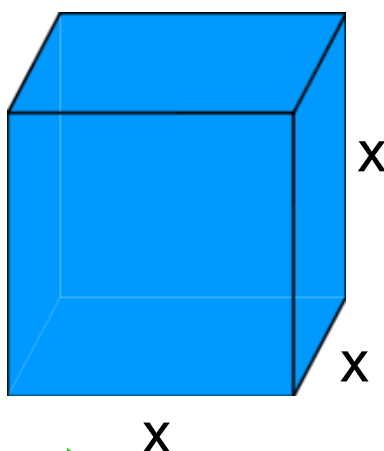
3) Solve the following equation:

$$3(5x - 6) + 10 - 5x = 92$$

4) Find the length of the rectangular prism with a width₃ of 6 inches, height of 10 inches, and a volume of 480 in³.

The surface area of the cube below is 1350 cm^2

REVIEW!



$$SA = 2 (LW + WH + LH)$$

$$1350 = 2 (x^2 + x^2 + x^2)$$

$$1350 = 2 (3x^2)$$

$$1350 = 6x^2$$

$$\frac{1350}{6} = \frac{6x^2}{6}$$

$$\sqrt{225} = \sqrt{x^2}$$

$$15 \text{ cm} = x$$

Plug in missing values and simplify.

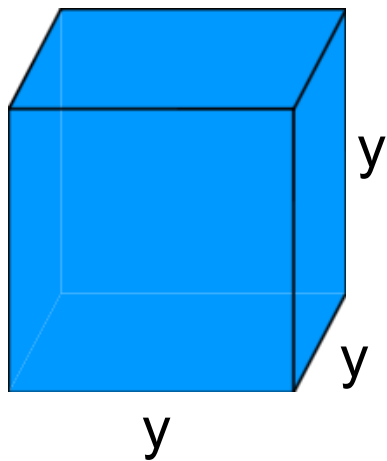
Solve your two-step equation!
First, divide both sides by 6

Then, take the square root of both sides to get rid of the exponent.

Then, you have your answer!

You try!

$$SA = 4704 \text{ in}^2$$



MOVE FOR
ANSWER